

## ABSTRACT OF THE DISCLOSURE

The present invention relates to a catalyst for removing  
5 aromatic halogenated compounds comprising dioxin, carbon  
monoxide and nitrogen oxide simultaneously and a method for  
preparing the catalyst, more particularly, a catalyst comprising  
0.1 to 5% by weight of vanadium, 1 to 12% by weight of metals in  
6A family and 0.1 to 10% by weight of Ag in titania carrier or,  
10 alternatively, a catalyst produced by impregnating said catalyst  
in 0.05 to 1M sulfuric acid solution to carry out acid treatment.

The catalyst according to the present invention has  
improved efficiency for removing 1,2-dichlorobenzene as a  
reactant model of dioxin and carbon monoxide rather than  
15 existing catalysts and also, alternative efficiency for removing  
nitrogen oxide substantially equal to commonly known catalysts,  
so that the catalyst can effectively control various air  
pollutants contained in exhaust gas.